

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,488	03/23/2004	Ronald P. Swanson	58696US002	3060
32692 7	590 05/15/2006	EXAMINER		
3M INNOVA	TIVE PROPERTIES	WOLLSCHLAGER, JEFFREY MICHAEL		
PO BOX 3342	7 N 55133-3427		ART UNIT	PAPER NUMBER
or. race, w	11 33133 3127		1732	

DATE MAILED: 05/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		A	- Na	A	<del></del>			
Office Action Summary		Application	on No.	Applicant(s)  SWANSON, RONALD P.				
		10/807,4	38					
		Examine	Examiner					
		Jeff Wolls		1732				
Period fo	The MAILING DATE of this communication a or Reply	ppears on the	cover sheet with the c	orrespondence a	ddress			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REF CHEVER IS LONGER, FROM THE MAILING nsions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period are to reply within the set or extended period for reply will, by state reply received by the Office later than three months after the ma- ed patent term adjustment. See 37 CFR 1.704(b).	DATE OF TH 1.136(a). In no ev od will apply and w ute, cause the app	HIS COMMUNICATION ent, however, may a reply be tin III expire SIX (6) MONTHS from lication to become ABANDONE	N. nely filed the mailing date of this D (35 U.S.C. § 133).				
Status								
1)[🖂	Responsive to communication(s) filed on 23	March 2004.						
·	This action is <b>FINAL</b> . 2b) $\boxtimes$ This action is non-final.							
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
•	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Dispositi	ion of Claims							
4) 🛛	4)⊠ Claim(s) <u>1-23</u> is/are pending in the application.							
•	4a) Of the above claim(s) <u>1-15 and 21-23</u> is/are withdrawn from consideration.							
5)	Claim(s) is/are allowed.							
6)⊠	☐ Claim(s) <u>16-20</u> is/are rejected.							
7)	Claim(s) is/are objected to.							
8)□	Claim(s) are subject to restriction and	or election re	equirement.					
Applicati	on Papers							
9)🖂	The specification is objected to by the Exami	ner.						
10)🛛	The drawing(s) filed on 23 March 2004 is/are	: a) <b>  </b> accep	ted or b)  objected to	by the Examine	er.			
	Applicant may not request that any objection to the	ne drawing(s) b	e held in abeyance. See	37 CFR 1.85(a).				
	Replacement drawing sheet(s) including the corre	ection is require	ed if the drawing(s) is obj	ected to. See 37 C	CFR 1.121(d).			
11)	The oath or declaration is objected to by the	Examiner. No	te the attached Office	Action or form P	TO-152.			
Priority u	ınder 35 U.S.C. § 119							
_	Acknowledgment is made of a claim for foreion All b) Some * c) None of:	gn priority und	der 35 U.S.C. § 119(a)	-(d) or (f).				
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority docume							
	3. Copies of the certified copies of the pr	-		ed in this Nationa	l Stage			
	application from the International Bure	•	, ,,					
* 8	See the attached detailed Office action for a li	st of the certi	fied copies not receive	d.				
Attachmen	t(s)							
1) Notic	e of References Cited (PTO-892)		4) Interview Summary					
	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/0	8)	Paper No(s)/Mail Da 5) Notice of Informal P		O-152)			
	r No(s)/Mail Date <u>6/20/05; 10/05/04</u> .	6) Other:		•				

#### **DETAILED ACTION**

#### Election/Restrictions

- Claims 1-15 and 21-23, drawn to a system for flexing a web, classified in class 425, subclass 263.
- Claims 16-20, drawn to a method of flexing a web, classified in class 264, subclass 280.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus can be used to practice a materially different method. For example, the apparatus can employ members that are not rotating members.

Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr. Rick Franzen on May 3, 2006 a provisional election was made without traverse to prosecute the invention of Group II, claims 16-20. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-15 and 21-23 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Art Unit: 1732

### Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggestive "Method for flexing a web".

#### **Double Patenting**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 16 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 13 of copending Application No. 10/806,957. Although the conflicting claims are not identical, they are not patentably

distinct from each other because the claim in the co-pending case employs a web handling systems whereas the instant case details a specific web handling system.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 17 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are indefinite due to a confusing antecedent basis. The claims refer to passing the "second portion" (underline added) along a "second roller" and "second belt assembly", respectively. Independent claim 16, recites that the "third portion passes over a second rotating member" (underline added). As such, the claims have been examined with the understanding that the "second portion" recited in claims 17 and 18, actually refers to the third portion recited in claim 16. This interpretation is fully supported by the specification.

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 1732

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 16, 17, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Brandes (U.S. Patent 4,190,245; issued February 26, 1980).

Regarding claim 16, Brandes teaches a method of decurling a web by inducing a plastic deformation in the web comprising: creating a web path wherein a first portion passes along a first rotating member (Figure 4, elements (P), (C), (16a)), a second portion includes a radiused section having an effective radius (Figure 4, element (B)), and a third portion passes over a second rotating member (Figure 4, elements (S), (G), (K), and (15)). The rotating members taught by Brandes are co-rotating (Figure 1, element (15) and (16); col. 3, lines 23-27). A plastic strain is introduced in the web when the web passes through the second portion in order to decurl the sheet being fed through the second portion (col. 1, lines 30-36).

As to claim 17, Brandes teaches that the first portion passes along a first roller and the third portion passes along a second roller (Figure 4, elements (15), (16a))

As to claim 19, Brandes varies the radius of the web as it passes through the second portion of the web path with a vacuum regulator (col. 4, lines 8-11).

Claims 16, 17, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Okubo et al. (JP Abstract 63171755; published July 15, 1988).

Regarding claim 16, Okubo et al. (hereafter Okubo) teaches a method of decurling (e.g. removing a rolled form) a web by inducing a plastic deformation in the

web comprising: creating a web path wherein a first portion passes along a first rotating member (Figure 8, elements (7) and (9)), a second portion includes a radiused section having an effective radius (Figure 8, elements (f), (h')), and a third portion passes over a second rotating member (Figure 8, elements (8) and (10)). The rotating members taught by Okubo are co-rotating (Figure 8, elements (7) and (8) are rotating counterclockwise). A plastic strain is introduced in the web when the web passes through the second portion in order to decurl the sheet being fed through the second portion.

As to claim 17, Okubo teaches the first portion passes along a first roller and the third portion passes along a second roller (Figure 8, Abstract).

As to claim 19, Okubo teaches varying the gap between the rollers according to the intensity of the curling (e.g. rolled form).

Claims 16, 18, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Mogensen (WO 98/56702; published December 17, 1998).

Regarding claim 16, Mogensen teaches a method of changing the direction of a traveling web of plastic film or fibers (page 7, lines 21-26) in a range of 10 ° to 170 ° by inducing a plastic deformation in the web comprising: creating a web path wherein a first portion passes along a first rotating member (Figure 1, element (FD)- feed direction; Figure 2, element (2)- rotating feed conveyor), a second portion includes a radiused section having an effective radius (Figure 1, element (9) – transverse fold line/baffle), and a third portion passes over a second rotating member (Figure 2, element (6)-

collection conveyor). The rotating members taught by Mogensen are co-rotating, for example, clockwise, when the change in direction of the web from the first conveyor to the second conveyor is less than 90°. A plastic strain is inherently introduced in the web when the web passes through the second portion over the transverse fold line/baffle.

As to claim 18, Mogensen teaches the first portion passes along a first belt assembly and the third portion passes along a second belt assembly (Figure 2, elements (2) and (6)).

As to claim 19, Mogensen teaches the transverse fold line/baffle is adjusted to vary the direction of the web. This necessarily varies the radius (page 9, lines 1-13).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandes (U.S. Patent 4,190,245; issued February 26, 1980).

As to claim 18, Brandes teaches the method of claim 16 as discussed in the 102(b) rejection above but does not expressly teach the first portion passing along a first belt assembly and the third portion passing along a second belt assembly.

Page 8

However, Brandes does teach a conveyor as part of the third portion and feeding the web from a press (Figure 4, (K), (P)).

Therefore, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the claimed invention to modify the expressly taught method of Brandes of employing rollers as the operative parts of the first and third portion of the web path with a belt assembly because one of ordinary skill would recognize that the web must be transferred to and from the decurling station and that a gap between two transferring belts would operate as an equivalent to two rollers. Further, the interchangeability of rollers and belts in applications is routinely practiced in the art depending on the specifics of the material being transported and the distance the material is being transported, for example. Finally, one of ordinary skill would clearly recognize the conveyor taught by Brandes could be a belt conveyor.

As to claim 20, Brandes teaches the method of claim 19, as discussed in the 102(b) rejection above but does not teach inducing a plastic strain that varies as a function of the web in the machine direction. However, it would have been *prima facie* obvious to one of ordinary skill at the time of the claimed invention to adjust the degree of vacuum applied to the gap to vary the induced plastic strain, as needed, in the machine direction as the web is fed through the gap in order to eliminate the curl and achieve the desired flat product (col. 4, lines 1-12; col. 1, lines 31-35).

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okubo et al. (JP Abstract 63171755; published July 15, 1988).

As to claim 20, Okubo teaches the method of claim 19, as discussed in the 102(b) rejection above but does not teach inducing a plastic strain that varies as a function of the web in the machine direction. However, it would have been *prima facie* obvious to one of ordinary skill at the time of the claimed invention to adjust the gap, as taught by Okubo, to vary the induced plastic strain, as needed, in the machine direction as the web is fed through the gap in order to eliminate the curl and achieve the desired flat product.

#### Conclusion

All claims are rejected.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Wollschlager whose telephone number is 571-272-8937. The examiner can normally be reached on Monday - Thursday 7:00 - 4:45, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on 571-272-1196. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/807,488 Page 10

Art Unit: 1732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**ERVISORY PATENT EXAMINER** 

Jeff Wollschlager Examiner Art Unit 1732

May 5, 2006